

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENERGY RESOURCES
Patrick Woodcock, Commissioner

LBE Clean Energy Grants for State Entities: Fleet EVSE Deployment



Program Context: EO594 Targets and Progress

Executive Order 594 sets targets for overall fleet electrification and EVSE installations at state facilities

Target	Current Progress*	2025	2030	2040	2050
Percentage of zero emission vehicles (ZEVs) in state fleet	~3%	5%	20%	75%	100%
EV charging stations at state facilities	303	350	500	TBD	TBD

*As of June 2022

Program Context: EO594 Targets and Progress

As of FY 2023, applicable state entities must acquire light-duty ZEVs for new purchases and leases


ZEV acquisition requirement applies to heavier-duty vehicles in FY 2025 and FY 2030.

Gross Vehicle Weight Rating (GVWR)	Effective date of ZEV acquisition requirement
✓ ≤ 8,500 pounds	July 1, 2022
≤ 14,000 pounds	July 1, 2024
>14,000 pounds	July 1, 2029



Getting Ready for State Fleet Electrification

Despite supply chain issues, upfront costs and TCO steadily improving



New state fleet EV acquisition policies (based on EO 594 requirements) in place + more EV models available



The time to kickstart fleet charging infrastructure build-out is now!

LBE Fleet EVSE Deployment Grant: Overview



Supports deployment of Level 1 and Level 2 fleet EV charging infrastructure



Covers up to 100% of costs associated with equipment, installation, pre-wiring for future charging stations, and/or prepaid ongoing costs



Streamlines funding mechanism and removes certain administrative challenges



Higher agency grant limits for fleet charging in Environmental Justice (EJ) neighborhoods

LBE Fleet EVSE Deployment Grant: By the Numbers

Total grant program funding available	\$800,000
Maximum grant allotment per entity, per fiscal year*	≤200 vehicles: \$100,000 >200 vehicles: \$150,000
Maximum award per project	None, but applicants seeking more than \$10,000 per charging port must provide justification
Number of charging ports	Minimum of 2 charging ports per project/site
Fleet electric vehicle procurement requirement	Ordered within 18 months of executed grant agreement
If 40% of charging ports installed in EJ neighborhoods...	Up to \$25,000 added to max. fiscal year allotment

**May be awarded across multiple grant applications*

LBE Fleet EVSE Deployment Grant: Eligible Applicants



1. Entities subject to Section 5 of EO594

- Public higher education
- Executive Branch Agencies (including those that acquire vehicles through OVM)
- MBTA non-revenue fleet

2. Entities that oversee state fleets or fleet operations -- may serve as proxy applicant

LBE Fleet EVSE Deployment Grant: Eligible Project Costs

- Equipment and installation costs, such as:
 - Networked or non-networked Level 1 or 2 AC charging equipment
 - Site assessments
 - Installation
 - Commissioning
 - Ancillary electrical work to make EVSE functional
 - Future station pre-wiring
- Prepaid ongoing services covering up to 3 years, such as:
 - Ongoing networking fees
 - Software and data packages
 - Maintenance packages
 - Extended warranties

Grants can cover any or all these components!



LBE Fleet EVSE Deployment Grant: Leased Facilities

- To be eligible for **hardwired** EVSE at state-leased sites, applicants must:
 - Plan to occupy leased space for at least five years
 - Agree to EVSE maintenance commitment (five years)
 - Receive and provide proof of landlord permission for equipment installation and maintenance
- If entity will not occupy space for 5+ years, grant funding is available for **portable** EV charging equipment and installation. Applicants must commit to bringing equipment to a new location should their lease end or the fleet is moved.

Examples of portable charging available on statewide contract VEH102



Additional Grant Program Requirements

Procurement methods

- Applicants must disclose chosen procurement method
 - Executive Branch must use VEH102 for equipment; may elect to use VEH102 for turnkey services, or secure installation services separately
 - Non-executive branch may conduct own procurement

Number of EV charging ports

- Must install at least 2 charging ports per site

Pre-wiring for EV-capable or EV-ready parking spaces

- Applicants strongly encouraged to include pre-wiring in projects

Additional Grant Program Requirements

Data reporting

- If project includes charging data services, must agree to support LBE data collection efforts

O&M

- Operate and maintain charging equipment for at least 5 years

EVSE installation timeline

- Agree to install EVSE within 6 months of grant award

EV acquisition

- Commit to ordering at least one fleet EV for purchase or lease within 18 months of a signed grant agreement

Anticipated Application Process

Subject to Change!

Identify Priority Sites

- Work with OVM, LBE, internal staff
- Leverage OVM ‘heat map’ if needed

Identify Charging Location(s)

- Within selected site, determine ideal location(s) for charging stations
- Consult “EV Charging Considerations Guide”

Solicit Vendor Quotes

- Develop scope of services for procurement – can use LBE template
- Best practice would be to solicit 3 bids for each project; refer to the OSD guidance and/or procurement staff for any additional requirements

Select Vendor

- Select a vendor, but cannot sign vendor contract before receiving notice of grant funding
- Agencies may elect to wait for grant award and contract with DOER before giving notice to proceed for selected vendor to ensure funding has been approved/allocated

Submit Grant Application

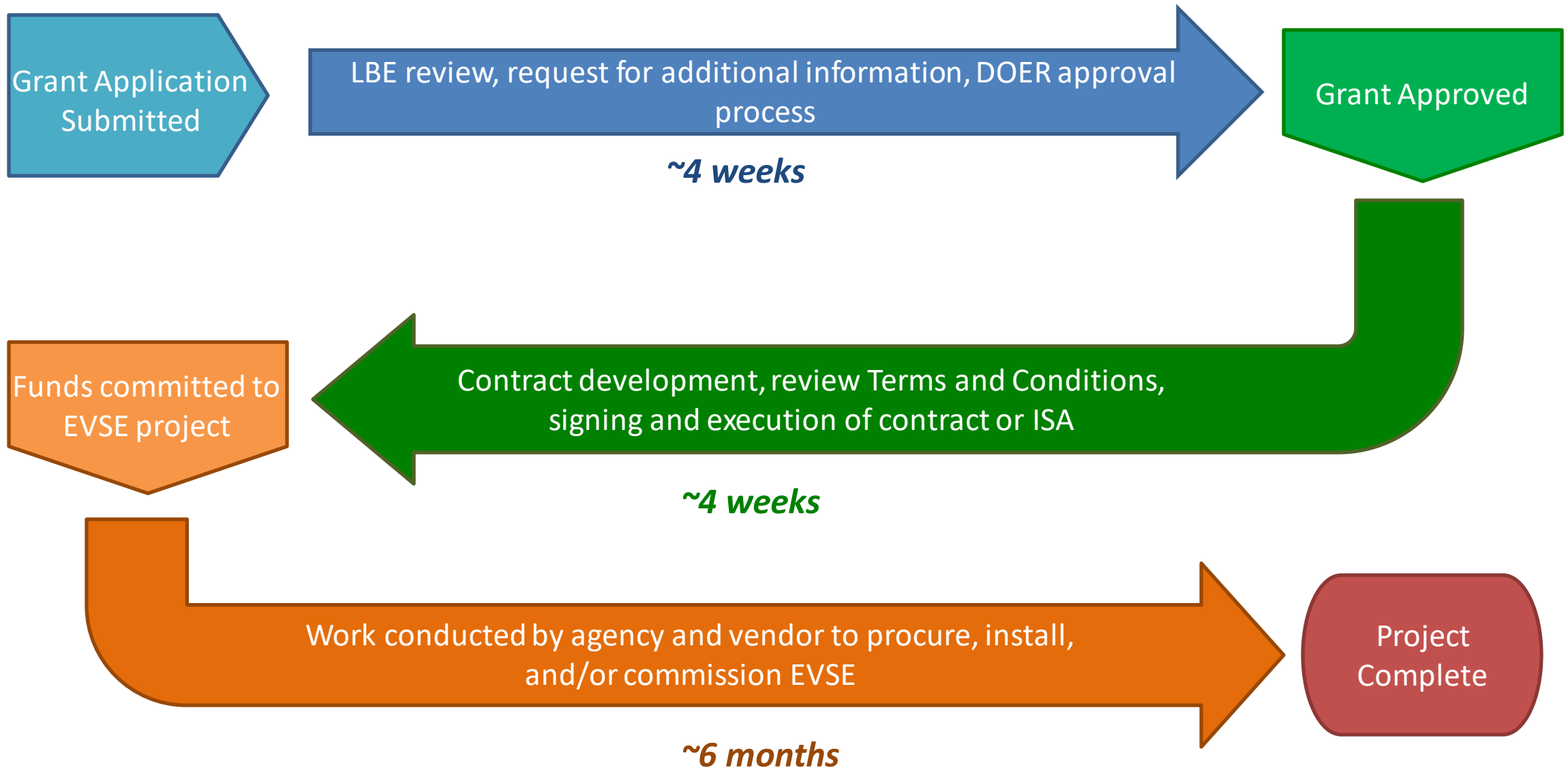
- Agencies should begin filling out application prior to selection of final cost proposal
- Include cost proposal(s) for any project elements that would be covered by LBE grant as part of the grant application

Typical (Anticipated) Application Timeline

Grant Application
Submitted

Anticipated Application Timeline

Subject to Change



Grant Application Form

- Applicants must submit completed application form + project cost proposal
- Application form intended to demonstrate all requirements of PON are met, made up of ten sections:

Contact
info

Procurement
Method

Leased
facilities

Data
collection +
sharing

Pre-wiring

Environmental
Justice

Scope

Costs

O&M commitment

Project justification and fleet electrification plans

1) Applicant Contact Information

Self explanatory!

1)

Applicant Contact Information:	
State Entity (e.g., agency or campus):	
Primary Contact Submitting Application:	
Primary Contact Title:	
Primary Contact E-mail:	
Primary Contact Phone:	
Select: New Application or Update to Existing Application	<input type="checkbox"/> New Application <input type="checkbox"/> Update to Existing Application
Date of Submission (whether new or update):	

2) Grant Application Scope

- Project components for which funding is requested (equipment, installation, pre-wiring, etc.)
- Grant funding amount
- Total estimated project cost(s)
- Project description
 - Site location(s)
 - Anticipated installation process and timeline
 - Fleet electrification efforts or plan; may provide as separate attachment

2) Grant Application Scope			
Is this LBE grant application for the purchase of equipment, installation, both, or something else?			
Total LBE grant funding requested (\$)			
Total estimated project cost (\$)			
Brief description of project, including where stations will be deployed, what the installation process will be, and approximate timeline. Include in this description an explanation of how this project will serve to assist the state entity's fleet electrification efforts, and how the EVSE funded through this grant will be utilized.*			
Proposed Project Location(s): <i>(Include specific lot or building, where applicable. If locations not yet known, please describe how locations will be selected.)</i>			
Which components of EVSE procurement, installation, and/or commissioning would the potential LBE grant fund?	Equipment	Select from drop-down	
	Site assessment	Select from drop-down	
	Installation	Select from drop-down	
	Commissioning	Select from drop-down	
	Pre-wiring for additional EV-ready/EV-capable parking spaces	Select from drop-down	
	*Network software and data reporting packages	Select from drop-down	
	*Maintenance packages	Select from drop-down	
	*Extended warranties	Select from drop-down	
Other (please describe)			

*Grant may be used for prepaid maintenance and data packages for no more than 3 years

3) Project Justification and Site Suitability

- Confirmation that site is appropriate for fleet charging
- Confirm compliance with PON requirements; must provide justification if seeking any exemptions

3) Project Justification and Site Suitability		
Will you attach a project proposal outlining the equipment and installation costs associated with the project?	Select from drop-down	
Does the proposed project location(s) currently house or garage EV fleet vehicles?	Select from drop-down	
Does the applying state entity currently own or lease electric or plug-in hybrid vehicles in its fleet?	Select from drop-down	
Will the EVSE installed via this project support shared fleet charging among multiple facilities?	Select from drop-down	
Is the site committed to installing EVSE within 6 months of a signed contract with DOER?	Select from drop-down	
Is the applying state entity committed to ordering at least one EV within 18 months of a signed agreement with DOER?	Select from drop-down	Agencies will need to provide a commitment that one or more EVs will be ordered for purchase or lease within eighteen (18) months of a signed agreement with DOER. For EV leases, the minimum term of the lease must be thirty-six (36) months.
If the answer is "no" or "don't know" for any of the above, please provide clarification and justification for the project, including how funding from this program will support the entity's fleet electrification efforts:		
Does the proposed project location(s) currently have any fleet EVSE in place?	Select from drop-down	
If fleet EVSE is already in place, please explain why additional fleet EVSE is needed. If appropriate, include additional attachments with relevant data or explanation.		

4) Eligible Procurement Methods

- Executive Branch must use VEH102 for equipment
 - May elect to use VEH102 for turnkey services, or secure installation services separately
- Non-executive branch may conduct own procurement for any equipment and/or services

4)	Eligible Procurement Methods	
Will VEH102 be used to procure EVSE?	Select from drop-down	
If VEH102 is not being used, please describe your proposed EVSE procurement method.		

5) Program Costs

- Target grant award amount:
\$10,000 per charging port
 - If costs exceed \$10,000 per port, must provide rationale
- Cost breakdown by component (e.g., equipment, site assessment, installation, etc.)
- Confirmation that project meets requirement of 2+ charging ports

5)		Program Costs			
Number of <u>hardwired Level 1</u> EV Charging Ports to be procured and installed:				<i>LBE estimated project cost (\$10,000 per port**)</i> \$ -	<i>Is proposed project more than \$10,000 per port?</i> No
Number of <u>portable or 'plug-and-play' Level 1</u> EV charging ports to be procured and installed:					
Number of <u>hardwired Level 2</u> EV Charging Ports to be procured and installed:					
Number of <u>portable or 'plug-and-play' Level 2</u> EV charging ports to be procured and installed:					
Based on the current project proposal or study, what is the estimated total project cost of: --EVSE procurement and/or --Installation and/or --Ongoing prepaid maintenance or data packages				<i>**LBE will not require additional financial information for projects where the total equipment and installation cost of Level II chargers is no more than \$10,000 per port. Applications with higher costs must submit additional information (cell D76) explaining why such costs are unavoidable and reasonable. LBE will evaluate such information when determining whether to make a partial or full award.</i>	
Please input the cost of each component of the project, if known. If costs are categorized differently or do not fall into any of these categories, please write costs and description of work in the "Other" category.	Equipment \$			<i>*Prepaid maintenance and data packages, for no more than 3 years, can be procured along with equipment</i>	
	Site assessment \$				
	Installation \$				
	Commissioning \$				
	Pre-wiring for additional EV-ready/EV-capable parking spaces \$				
	*Network software and data reporting packages \$				
	*Maintenance packages \$				
	*Extended warranties \$				
	Other (include cost and description)				

6) Pre-Wiring, 7) Data Collection, 8) Station Maintenance

- Number of EV-ready or EV-capable spaces to be pre-wired
- Use of networked or non-networked charging
 - For networked charging, describe how data will be collected/shared
- Confirmation that operating entity will maintain charging infrastructure for 5+ years

6) Pre-Wiring Requirements		
Number of EV-ready and/or EV-capable parking spaces created as part of this project.		
If not implementing EV-ready and or EV-capable parking spaces as part of this project, please provide an explanation as to why such spaces are not appropriate or feasible.		

7) Data Collection and Sharing		
Will this project include network-capable stations?	Select from drop-down	
If yes, please describe how data will be collected and shared with LBE.		

8) Station Maintenance Commitment		
Will the applying state entity operate and maintain the fleet EVSE, including any associated costs beyond what is covered through this grant program, for a minimum of five years following final installation and commissioning?	Select from drop-down	
If no, please provide justification.		

9) Leased Facilities *(if applicable)*

- For hardwired EVSE at leased sites, list and provide the following:
 - Permission from landlord
 - Signed lease agreement confirming site will be in use by state entity for next 5+ years

9) Leased Facilities		
Will any EVSE funded by this project be installed at a leased facility?	Select from drop-down	
Please attach, and note the file name here, a written and signed statement from the landlord granting permission to the state entity to install, maintain, and keep the EVSE for at least 5 years from the date that the EVSE is operational.		
Please attach, and note the file name here, a copy of a signed lease agreement for the time period described above.		

10) Environmental Justice

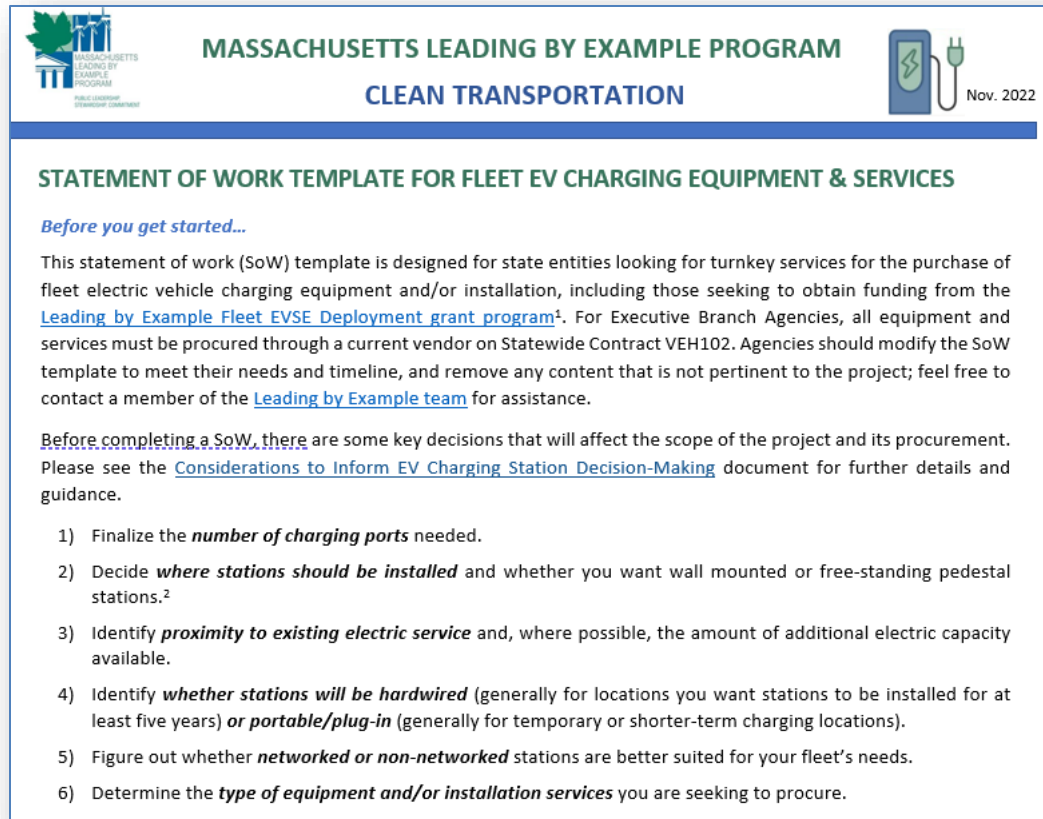
- Indicate total number of EV charging ports potentially *funded by the LBE grant* that will be installed in EJ neighborhoods, as defined by EEA policy
- Option to detail any potential benefits of the project to EJ populations

10) Environmental Justice (EJ) Adder		
How many of the EVSE ports funded through this grant program will be located in neighborhoods that meet the EJ population criteria as defined by the EEA Environmental Justice Policy?	Select from drop-down	
See EJ Policy and interactive map of EJ census blocks here: https://www.mass.gov/environmental-justice		
OPTIONAL: Please describe any potential benefits this project may have for Environmental Justice Populations. (e.g., electrification of fleets that operate primarily in EJ census blocks, providing learning opportunities for schools or community organizations, reducing fleet operations costs to better serve EJ populations, etc.)		

Ready... Set... APPLY!

- Review PON to ensure your project/equipment meets all requirements
- If needed, consult LBE team to discuss project, determine eligibility, and confirm funds are available
- Submit required and supporting documentation on COMMBUYS and submit to LBE-grants@mass.gov as backup
 - Application form
 - Project cost proposal(s) for equipment and/or related services
 - Other optional information as needed to supplement or replace narrative components of application (e.g., fleet electrification or EVSE plan)
- Work with LBE to provide additional information as needed, finalize contract, and proceed with project

Resource Spotlight: Fleet Charging Scope of Services Template



- Designed for state entities seeking turnkey fleet charging services, e.g., through VEH102
- Filled out with illustrative mock agency information as example
- Can be modified to meet specific fleet charging needs and timelines

Fleet Charging Scope of Services Template

- Site information and map
- Equipment specifications
- Installation requirements
- Additional site prep as desired (e.g., bollards, painting, signage)
- Vendor requirements
- Proposal requirements (e.g., cost breakdown, O&M considerations)
- Evaluation process for proposals
- Grant application assistance
- Bid and award schedule



Proposed Station Locations

- Four parking spaces have been identified in the site's public lot and two dual-port Level 2 AC chargers are being sought for this location.
- Four parking spaces have been identified in the site's employee lot and two dual-port Level 2 AC chargers is being sought for this location.

The parking spaces are approximately fifteen (15) feet from transformer with no existing conduit.

Bidders will have an opportunity to conduct a site visit prior to proposal submission. Please see schedule in [Section 10](#) for site visit date and time. If planning to attend the site visit, please send an email no less than 48 hours in advance to [Jordan Canopy at Jordan.Canopy@dgt.gov](mailto:Jordan.Canopy@dgt.gov) with a list of attendees.

4 EQUIPMENT & INSTALLATION REQUIREMENTS

5 EQUIPMENT SPECIFICATIONS

All proposals must meet the following requirements:

Charging Type	<input type="checkbox"/> Level 1 AC <input checked="" type="checkbox"/> Level 2 AC <input type="checkbox"/> DCFC <input type="checkbox"/> Other: _____
Port Configuration	<input type="checkbox"/> Single port <input checked="" type="checkbox"/> Dual port
Data Networking	<input checked="" type="checkbox"/> Networked <input type="checkbox"/> Non-networked
Mounting	<input checked="" type="checkbox"/> Free standing <input type="checkbox"/> Wall-mounted
Electrical Input	<input checked="" type="checkbox"/> 208/240V AC (Level 2) <input type="checkbox"/> 480V three-phase (DCFC) <input type="checkbox"/> Other: _____
Electrical Output	<input checked="" type="checkbox"/> Minimum 7.2 kW (Level 2) <input type="checkbox"/> Other: _____
Connector Type	<input checked="" type="checkbox"/> SAE1772 <input type="checkbox"/> CCS/CHAdeMO combo <input type="checkbox"/> Other: _____
Cable Configuration	<input checked="" type="checkbox"/> 18-ft retractable <input type="checkbox"/> 18-ft non-retractable <input type="checkbox"/> Other: _____

VEH102: Advanced Vehicle Technology Equipment, Supplies and Services

- Vendors may provide equipment, installation services, turnkey solutions, and/or maintenance, including the following:

Hardware (charging equipment)

Network software and reporting services

Site assessments

Installation and/or commissioning

Servicing and/or maintenance

Other software-as-a-service solutions



Access VEH102
contract user guide
and list of approved
vendors [here](#)

Helpful Resources

- **[LBE Scope of Services Template for Fleet EV Charging](#)** ⇒ This document provides template language for partners to utilize when procuring EV charging stations, particularly those intended for fleet use.
- **[Considerations to Inform EV Charging Station Decision-Making](#)** ⇒ This two-page resource is intended to better inform the initial decision-making process for all types of electric vehicle (EV) charging station installations at state facilities, including public, workplace, and fleet.
- **[Contract User Guide - VEH102](#)** ⇒ Executive Branch Agencies are required to use this contract for the acquisition of advanced vehicle and alternative transportation equipment, hardware, software, and services including EV charging station equipment & services.
- **[LBE Quick Guide: EV Charging](#)** ⇒ This two-page 'quick guide' includes introductory information on electric vehicle types, incentives available for state entities, and procurement resources.

Questions? Comments?